VA Changes with Technology

Sonia Ancoli-Israel, Ph.D., Michael Kauth, Ph.D. & Louise Mahoney, M.S.

Imagine a day when patients are empowered to actively participate in their own healthcare, communicate with their provider in real time, and access and even update medical records from home. That day is fast approaching, and the VA is piloting this revolutionary change in healthcare. According to Dr. Robert Kolodner, Acting Chief Information Officer for VHA, "My Health*e*Vet is to healthcare today, what the electronic health record was to healthcare 20 years ago. The '*e*' stands for both 'electronic' and 'enabler' because this system enables veterans to become active participants in their own healthcare." My Health*e*Vet is a secure Internet-based resource by which patients may view and update portions of their medical record, such as blood pressure or blood glucose levels. Dr. Kolodner suggests that this and other technological advances will bring about a fundamental change in the provider-patient relationship and move toward a more consultant-client type of relationship.

This is not the first change in healthcare as a result of technology. "Prior to computers, everything was written by hand or typed," recalls Larry Lehmann, M.D., Chief Consultant, Mental Health Strategic Health Care Group. "We made carbon copies which were messy and difficult to read. Communication was largely by telephone, and we relied on postal mail to communicate large amounts of information." In addition to inconvenience, "before computerized patient records, clinicians usually received the meaningful part of a patient's medical record only half the time," notes Dr. Kolodner. "In the old days", adds Dr. Lehmann, "paper records greatly increased the likelihood of error; paper alerts could be missed or lost, notes were misplaced, and handwritten notes were difficult to read. Physical charts were difficult to update if patients were treated in multiple clinics or moved often

between facilities. In VA, computerized medical records and clinical reminders decrease fragmentation and improve patient care coordination. Greater access to information in the clinical setting also facilitates empowering patients to participate in treatment decision-making."

New technologies enhance care coordination in the VA and translation of evidence-based practice into routine clinical care. Dr. Lehmann notes, "We want to find ways to provide optimal treatment in minimal visits. Telemedicine approaches may allow us to maintain contact with at-risk patients and increase their participation in care without an actual visit to a clinic. Technologies will allow the VA to make specialty treatments

MIRECCs Utilize Technology to Advance Clinical and Educational Mission

Michael Kauth, Ph.D., Robyn Walser, Ph.D. & Sonia Ancoli-Israel, Ph.D.

Use of technology for communication. A primary mission of the MIRECCs is to improve clinical care by translating science-into-practice through a national exchange of clinical information and through quick implementation of the latest research developments. Some MIRECCs span several states and time zones multiplying this organizational and communications challenge. However, with new technologies, the MIRECCs have improved the quantity and quality of information exchange throughout their networks and have advanced clinical care goals. Effective communication is critical to the MIRECCs' mission and, over the past 5 years, email and the Internet have replaced telephone, FAX, and postal mail as primary forms of communication. Today each MIRECC relies heavily on daily email communication (via Outlook) and regular teleconferences (via VANTS) to support administrative activities of the Centers and coordinate research and education programs, particularly since geographic barriers and ever-shrinking travel dollars prohibit regular face-to-face meetings. These media venues have helped to bridge the gap between facilities, as well as between networks, allowing

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geographically distant MIRECC staff and investigators to interact quickly and frequently.

Use of technology for teaching/training. Technologies play a critical role in educating staff and disseminating information. Several MIRECCs publish electronic (and paper) newsletters or reports to inform stakeholders about educational offerings and new clinical findings. One monthly newsletter reaches the desktop of more than 1,600 clinical providers, administrators, and investigators in other MIRECCs, national VA research centers, and national veteran advocates.

Regional conferences are a staple of information dissemination, but they are also costly, resource-intensive, and available only to a few. To reach larger audiences, many MIRECCs videotape their educational conferences and distribute tapes to other facilities and make them available through the VA Library System. Some MIRECCs digitalize their videotapes and provide VA clinicians the opportunity to download and view video of conferences at their desktop computer (see video-streaming web sites at http://mirecc.stanford.edu and http://www.mirecc.org) and receive continuing education credit at no charge. Hundreds of videos are now available at these sites. One MIRECC, in collaboration with patient-advocate Moe Armstrong, is videotaping his new *Vet-to-Vet* peer-counseling program for veterans with severe mental illness. Videotaped training modules of this program can then be disseminated widely.

In addition to administrative communication, several MIRECCs now use videoconferencing to provide direct education or clinical consultation. In one MIRECC alone, more than 4,000 VA clinicians (in 3 time zones) have participated in their free, accredited educational series. Live videoconferencing permits an almost unlimited number of participants at very little direct cost. Other successful videoconferenced programs include a series on schizophrenia at four different facilities; a day-long live videoconference on suicide assessment and prevention that included approximately 440 clinicians; a videoconference on the fundamentals of group therapy that linked mental health staff at all 10 medical centers; and bimonthly psychopharmacology presentations and consultations for complex cases. To provide these many programs as satellite broadcasts or face-to-face meetings would have been prohibitively expensive. More portable electronic training products developed by MIRECCs include CD-ROMs and whole treatment manuals available through file-sharing or downloading from the web.

Most MIRECCs have Internet web sites or VA intranet web pages to disseminate information about effective mental health treatments. Intranet pages are often employed to share information and software within the VA system. However, Internet web sites allow VA clinicians to view video of conferences, receive continuing education credit, download articles (and whole manuals),

and query clinical experts. One web site also provides a forum for veterans to ask questions. Very soon a national MIRECC web site will provide information about the 8 centers as a national program and serve as a gateway to individual MIRECC web sites. The website will also link visitors to MIRECC educational products and to other important mental health sites.

Use of technology for patient education. The MIRECCs have also exploited technology to facilitate patient education. A variety of electronic formats deliver patient information or teach skills, such as the "PTSD Families Matter" videotape which describes how PTSD affects the family and what treatments are available through the VA and Vet Centers, an interactive CD-ROM which demonstrates effective behavioral management skills to dementia caregivers, and an audio CD, "Veterans Helping Veterans," which features testimonials from combat veterans for veterans entering a PTSD treatment program.

To reach beyond on-site facilities, some MIRECCs have developed innovative strategies to address the clinical needs of patients who have difficulty coming to the facility. One MIRECC uses telephone contacts for more frequent assessments and check-ups for dual diagnosed veterans in compensated work therapy programs; in another, the telephone is used to screen patients for depression and alcohol use, as well as provide supportive care; and another MIRECC is evaluating the benefit of home-based videophones for veterans with severe mental illness who also have medical or transportation problems that prevent frequent face-to-face appointments. In addition, several MIRECCs have employed or are developing clinical reminders for computerized medical records and touch-screen information kiosks and interactive web sites for patients.

The table below lists illustrates the number of technologies used by each MIRECC. As new technologies emerge, the MIRECCs will continue to adapt these to educate, reduce clinical education costs, and improve patient care.

MIRECC and Fellowship Use of Technology

	Email	E-Newsletter/ Journal	Teleconf	Videoconf	Website	Videotapes	CD-Roms	pdf/ Electronic files
Fellowship*	x		x	x	x	x	x	x
VISN 1	x							
VISN 3	x	x	x	x		x	x	
VISN 4	x		x	x	x	x	x	
VISN 5	x	x	x	x	x	x	x	
VISN 16	x	x	x	x		x	x	x
VISN 20	x		x	x		x	x	
VISN 21	x	x	x	x	x	x		x
VISN22	x		x	x	x	x		x

* Also use satellite braodcast and VA Knowledge Network

EDUCATION ACTIVITIES

VISN 3 December 5 (Tentative)	**Psychosocial Rehabilitation: Substance Abuse and Dual Diagnosis Conference** Co-Sponsored by MIRECC & NYHVAHCS Manhattan VAMC
Mid May—June	**Suicide Assessment Workshops** Weekly at each VISN facility Contact: Bruce.Levine@med.va.gov
VISN 4 April 15 8:00 am—12:00 noon	**Detoxification: Treatment Protocols & Strategies to Engage Addicted Patients in Ongoing Care Conference** Pittsburgh, PA Contact: Sara.Salmon-Cox@med.va.gov
May 29	**Treating the Aging Veteran: Practical Approaches to Integrating Medical & Psychiatric Care** Philadelphia, PA Contact: Ruckdesc@mail.med.upenn.edu
VISN 5 June 9	**Women and Affective Disorders** Sheraton Inner Harbor, Baltimore, MD Contact: Erica.Chestnut@lrn.va.gov
October 20	**Schizophrenia and Medical Co-morbidity** Maritime Institute, Linthicum Heights, MD Contact: ley@chepinc.org
VISN 16 September 24-25	**8th Annual Addictions Conference: Bringing Practice Guidelines to Clinical Practice** Biloxi, MS
June 19 Noon CT	**Mental Illness Stigma Intervention** Web-based conference by Dr. Michelle Sherman Contact: Michael.Kauth@med.va.gov
VISN 20 September 12-13	**"MIRECC Presents"**, a bi-weekly V-Tel Conference on a range of mental health topics
October 10	**PTSD and Families Conference: Paths Toward Healing** Portland VAMC Contact: Shannon.squire@med.va.gov
VISN 21 TBA	**PTSD & Substance Abuse: Clinical & Research Updates** VA Palo Alto Health Care System Contact: Robyn.walser@med.va.gov
June 11	**6th Annual Updates on Dementia Conference: Translating Research into Practice** Fairchild Audiorium, Stanford University School of Medicine Contact: jdandrea@stanford.edu
VISN 22 Ongoing	**Online CME** Courses on Improving Functional Outcome, Rehabiolitation, Co-Morbidity & Geropsychiatry http://www.mirecc.org Contact: Louise.Mahoney@med.va.gov

NATIONWIDE MIRECCs

VISN 1

Bruce Rounsaville, M.D., Director   (203) 932-5711 x7401
West Haven, Connecticut
http://www.mirecc.org/other-mireccs/visn1/visn1.html
Improve care for veterans with mental illness and substance dependence

VISN 3

Larry Siever, M.D., Director   (718) 584-9000 x3704
Bronx, New York
http://www.va.gov/visns/visn03/mirecc.asp
Investigate causes and treatments of serious mental illness

VISN 4

Ira Katz, M.D., Ph.D., Director   (215) 349-8226
Philadelphia, Pennsylvania
http://www.va.gov/visn4mirecc
Advance care for veterans with concurrent physical, mental and/or substance use disorder

VISN 5

Alan S. Bellack, Ph.D., ABPP, Director   (410) 605-7451
Baltimore, Maryland
http://www.va.gov/visn5mirecc
Improve care for veterans with schizophrenia and for their families

VISN 16

Greer Sullivan, M.D., M.S.P.H., Director   (501) 257-1712
North Little Rock, Arkansas
http://www.mirecc.org/other-mireccs/Visn16/visn-16.html
Close the gap between mental health research and clinical practice

VISN 20

Murray A. Raskind, M.D., Director   (206) 768-5375
Seattle, Washington
http://www.mirecc.org/other-mireccs/Visn20/visn-20.html
Investigate the genetics and neurobiology of schizophrenia, PTSD and dementia

VISN 21

Jerome Yesavage, M.D.,Director   (650) 852-3287
Palo Alto, California
http://mirecc.stanford.edu   MIRECC Fellowship Hub Site
Individualize treatments for veterans with PTSD or with Alzheimer's Disease

VISN 22

Stephen R. Marder, M.D., Director   (310) 268-3647
Los Angeles, California
http://www.mirecc.org
Improve functional outcomes of veterans with psychotic disorders

available at a distance and improve participation by veterans in remote locations." Dr. Lehmann adds that translational projects in the VA use electronic feedback mechanisms to bring prescribing practices closer to best practice or clinical reminders to provide instant information about the most appropriate medications and best way to deliver them.

Technology has also changed education and collaboration. Face-to-face meetings continue to have value, but they are expense and time-intensive. Most VA staff now has access to the Internet and to user-friendly email, which makes it possible to transmit large amounts of information to many people instantly. Many staff also have remote access capabilities which allow them to communicate and function away from the office. Dr. Lehmann notes, "Through EES, the VA now has excellent online learning capabilities. The MIRECCs and the National Center for PTSD are all very good at using technology for education for care providers and even for the public." Recent technological advances have set the stage for new areas of research in service delivery as well as development of diagnostic tools for mental illness.

Drs. Kolodner and Lehmann point out that the VA, more than other health care organizations, has exploited new technologies to enhance the coordination and delivery of effective health care.

The Role of Technology in the VA Special Fellowship in Advanced Psychiatry and Psychology

Quinn Kennedy, Ph.D. & Ruth O'Hara, Ph.D.

The goal of the VA Special Fellowship Program in Advanced Psychiatry and Psychology is to train Fellows to become leading clinical researchers. As a national program with 8 participating MIRECC sites, the Fellowship Hubsite employs a wide range of electronic technologies to expediently coordinate information across the sites. Common and indispensable technologies for the Hubsite include email, web technology, teleconferences, and videoconferences. The Hubsite has created a password-protected website where Fellows obtain information about the program, curriculum and events, career development information, job opportunities, and postings of educational activities. Email is used to disseminate information about upcoming events, meetings, program issues, and other business. Semi-monthly Fellowship Directors' meetings are conducted by teleconference, in real-time, allowing for rapid exchange of ideas among numerous individuals around the country.

A popular feature of the Fellowship program is a videoconference (V-Tel) series whereby mental health experts present on key components of the core curriculum. Topics have ranged from the latest biostatistical methodologies in mental health research to specific information about NIH career development awards. The V-Tel series allows the Fellowship program to conduct virtual classrooms, audiovisually connecting Fellows at their respective MIRECC sites to each other and providing Fellows the opportunity to develop relationships with renowned clinical researchers. In short, these technologies improve multi-site interactions and enhance the effectiveness of the Fellowship Program.

Look for the new National MIRECC Centers Website
Coming in late spring, 2003

www.mirecc.med.va.gov